

ARRL TECHNICAL ADVISOR NEWSLETTER

February 27, 1980

Welcome to our new TAs! An updated technical-advisor list is available to anyone who may have lost the Jan. 1980 list.

There has been some question among the new and established TAs concerning exactly what the duties of a TA are. We'd like to consider these functions as voluntary services rather than "duties." Here is a brief rundown on the services we would like to receive from our TAs:

- 1) Critique specific QST manuscripts in the area of the TA expertise, as required.
- 2) Respond to technical inquiries by phone or letter when consulted by Hq. staffers or League officials.
- 3) Offer written critiques of League publications (including QST) when technical errors or typos are observed.
- 4) Offer constructive criticism of League publications when appropriate.
- 5) Contribute QST articles and League book material if time and inspiration permits.

The foregoing are primary services. Here are some secondary and purely voluntary services:

- 1) Represent the League at ARRL club meetings, hamfests and conventions by giving technical lectures. (Coordination is via Mrs. Marge Tenney at ARRL Hq.) Travel and accommodation expenses will be paid by The ARRL when such travel is authorized.
- 2) Provide services as an "expert witness" in litigations involving radio amateurs. Such testimony will be in accordance with directives (guidance and coordination) from the ARRL Legal Counsel or a Hq. official.
- 3) Assist ARRL members when they have technical questions to ask by mail or via telephone.

The period of appointment for TAs is ~~two~~ ^{one} years. Renewal of such appointments is subject to mutual agreement between the TA and the Technical Department Manager, the League President and the Division Director.

November 5, 1981

ARRL TECHNICAL-ADVISOR NEWSLETTER

We have added some names to our TA roster since the last Newsletter was issued. A warm welcome goes out to the new members of our elite team!

We have a need at ARRL HQ for a video tape deck. It would be used by our Club & Training Department, and for some of the work done in our technical department. If one of you knows where we might obtain a quality machine at a reasonable price (used gear or partial donation), please contact Steve Place, WB1EYI, at HQ.

QST Articles: We want to thank TA Hayward for the excellent article, "The Progressive Receiver," that appeared in November 1981 QST.

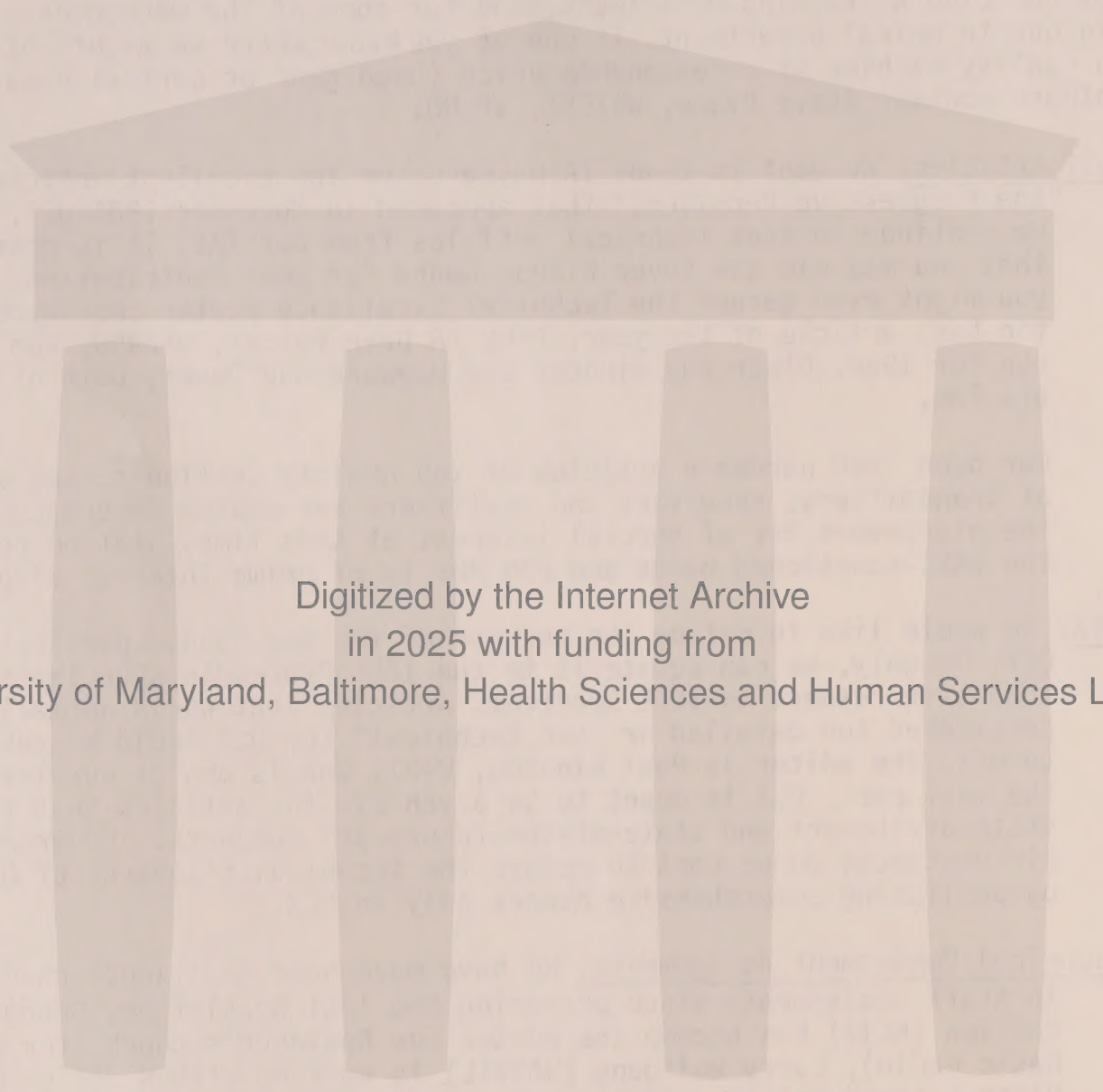
We continue to seek technical articles from our TAs. It is possible that you may win the Cover Plaque Award for your contribution, and you might even garner the Technical Excellence pewter cup award for the best article of the year. ARRL TA Dave Geiser, WA2ANU, won the cup for 1980. Other cup winners are Hayward and Oxner, both of whom are TAs.

Our need for hardware articles of top quality continues. The subjects of transmitters, receivers and amplifiers for medium frequency through the microwaves are of special interest at this time. Station gear for the WARC-sanctioned bands and 900 MHz is of prime interest also.

QEX: We would like to define the purpose of the new League publication, QEX. Roughly, we can equate it to the IEEE Proceedings or Transactions with respect to IEEE Spectrum. Articles that would normally be considered too detailed or "too technical" for QST would be submitted to QEX. The editor is Paul Rinaldo, W4RI, who is one of our TAs. For the most part, QEX is meant to be a vehicle for articles that treat state-of-the-art and state-of-the-future-art subjects. Under no circumstances do we want to reduce the technical standards of QST by publishing comprehensive papers only in QEX.

Technical Department Assignments: We have made some additional changes in staff assignments since preparing the last Newsletter. George Collins (KC1V) has become the editor for Beginner's Bench (formerly Basic Radio). Larry Wolfgang (WA3VIL) is working with W1JEC on the Hints & Kinks column, and he will succeed Stu as column editor in January 1982, at which time Stu will have retired. Doug DeMaw has once more taken over the Technical Correspondence column to permit the former conductor, Jerry Hall, more time for book editing and revision. Jerry and Chuck Hutchinson (K8CH) are presently finishing the revision of our Antenna Book. Handbook Editor Woodward (W1RN) has been designated as project engineer for the technical department.

1982 Handbook: Our greatly updated 1982 Handbook will be off the presses toward the end of this month. A copy will be sent to each TA as soon as we have an ample supply at HQ. Please jot down any technical or typographical errors you find, then send the list to George Woodward. Previously, TA response to this request has been somewhat dismal.



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Your input is needed to help ensure that our books are of first-rate quality. We welcome suggestions for improving all of our books. Recommendations for improvement should be sent to Assistant General Manager Sumner, K1ZZ, who is in charge of the ARRL book program.

Biological Effects TAs: The updated TA roster that accompanies this Newsletter contains the names of six new TAs. These advisors served for some time without appropriate recognition. We are happy to have them on the official list. They are experts on the biological effects of rf energy, and report to Dale Clift, WA3NLO, of the HQ staff.

Current Membership Rate: Complaints have been received from at least two TAs concerning the present dues rate of \$25. One TA was thinking of giving up his League membership and necessarily dropping out of the TA program. The new rate was mandated by the Board of Directors through economic necessity. The ARRL is also faced with escalating costs for materials, services and staff wages. As a not-for-profit membership/service organization it is vital that the League remain financially sound. The dues increase was necessary to meet this objective. But even at \$25 per year, the member pays only 6.8 cents per day to support Amateur Radio. This, compared to a pack of cigarettes, a cocktail or an \$800 transceiver, is a very modest sum!

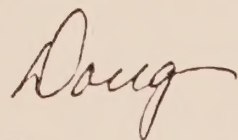
Unguided-Light Communications: We carried a short piece last summer in Technical Correspondence about unguided light-beam communications. The response was substantial, which indicated an interest in the subject among amateurs. It is reasonable to assume that light beams will have a significant place in Amateur Radio work in the future. Computer linking is but one application. If you know of anyone who has been doing amateur or professional R&D work in this area, please have them contact W1FB. Laser communications are now recognized by the League for contest points, and other forms of unguided-light communications should prove useful to amateurs who are willing to experiment.

TA Profiles: Marian Anderson, WB1FSB, has not received personality sketches and photographs from a number of you. Please send her this material so that she can prepare a filler for QST. Include details of your present position, academic credentials, hobbies and primary amateur interests. What say?

Convention Service: Just a reminder that your services as technical speakers at club meetings, hamfests and conventions are needed and appreciated. The League will pay your travel and accommodation expenses (one person only) after coordination with Marge Tenney, WB1FSN, at HQ. Let her know if you are available and indicate the subject you prefer to address when giving technical papers. She will call upon you when a speaker is needed in your general area (typically a 200-mile radius from your home). You will be insured while you are enroute to, at, and enroute home from the field trip.

Please contact W1FB should you need advice or assistance in connection with your TA services. Many thanks for the fine work you've done on behalf of the League and Amateur Radio.

Personal 73,


Doug DeMaw, W1FB

There is no question as to the fact that the United States is a free country, and that the people of this country are entitled to the same rights and liberties as the people of any other free country. It is the duty of every citizen to stand up for these rights and liberties, and to oppose any and all attempts to take them away.

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TAs

ADAMOSKY, Patrick, K7BEP 18285 N.W. Parkview Portland, OR 97229	RFI/EMI	(H) 503-645-7501 (B) 503-644-0161 Ex. 7
BATTLE, John O., N4CE 2350 East Hill Way Norcross, GA 30071	RF microwave circuit design/ hf receiver design	(H) 404-449-8536 (B) 404-894-3544
BELROSE, John S., VE2CV 3 Tadoussac Drive Aylmer, Que. CANADA J9J 1G1	Antennas	(H) 819-776-4457 (B) 613-596-9362
BRADSHAW, Norman, W8EEF 646 E. Glenlord Road Saint Joseph, MI 49085	Use & maintenance of electronic test equipment	(H) 616-429-9862 (B) 616-982-3482
CHAMPA, John, K8OCL 21 West College Street Fredericktown, OH 43019	Industrial Health and Safety	(H) 614-491-3974 (B) 614-397-0121
CORBITT, Mark A., WB4FNE 6568 Beach View Drive, #311 Rancho Palos Verdes, CA 90274	Digital Communications/ Satellite links	(H) 213-377-1385 (B) 213-535-0540
DICKINSON, Robert V. C., W2CCE E-Com Corporation 320 Essex Street Stirling, NJ 07980	CATV/CATV leakage problems	(H) 201-464-3081 (B) 201-647-6700
GEISER, Dave, WA2ANU RFD 2, Box 787 New Hartford, NY 13413	VHF/UHF Components and Applications	(H) 315-737-5154 (B) 315-793-5219 (after 12:00 P.M)
GRANBERG, Helge, K7ES 2144 E. Aurelius Avenue Phoenix, AZ 85020	MF/HF RF Power	(H) 602-943-0401 (B) 602-244-4373
GREBENKEMPER, John, KA3BLO 1711 Parkhills Avenue Los Altos, CA 94022	Solar astronomy, space propagation and satellite links and receivers	(H) 415-494-9272 (B) 408-262-1411
HAYES, Albert E., Jr., K6BH 2512 Monterey Place Fullerton, CA 92633	RFI/RFI filter design & applications	(H) 714-992-1440 (B) 714-992-1440
HAYWARD, Wes, W7ZOI 7700 S.W. Danielle Avenue Beaverton, OR 97005	Rcvr. Design/Testing	(H) 503-646-2754 (B) 503-627-1459
HEJHALL, Roy C., K7QWR 4302 E. Mulberry Drive Phoenix, AZ 85018	RF Power Devices and Applications	(H) 602-955-0842 (B) 602-244-4374

HELFRICK, Albert, K2BLA RFD 1, Box 87 Boonton, NJ 07005	RTTY	(H) 201-263-2927 (B) 201-334-1800
HIEHLE, Michael E., W6RZ 10719 Esterina Way Culver City, CA 90230	Hf/vhf/uhf antennas	(H) 213-838-5083 (B) 213-391-0711 Ex. 3267
KANE, L. Edward, W6ONT 10282 Whirlaway Street Cypress, CA 90630	Antennas & Radiation Patterns	(H) 714-761-2601 (B)
KIDD, Deane E., W7TYR 27270 S.W. Ladd Hill Road Sherwood, OR 97140	Component specifications and sources	(H) (B)
LEWIS, Oliver K., W4EVV 1791 Tullie Circle, N.E. Atlanta, GA 30329	Metrics	(H) 912-432-0217 (B) 912-436-4675
MACHEEL, Douglas, K6HLE 6387 Rainbow Drive San Jose, CA 95129	VHF broadband amplifiers and remote base stations	(H) 408-252-1272 (B) 415-966-3451 or 415-966-3161
MAGUIRE, John A., AE9I 6740th ESW, Box 2035 Ft. Meade, MD 20755	Microwave measurements	(H) 301-672-3612 (B) 301-796-6501
MARKWARDT, AL, W5PXH 826 Sherbrook Drive Richardson, TX 75080	Antennas/RFI	(H) 214-235-0996 (B) 214-234-7786
MAXWELL, Walter, W2DU 243 N. Cranor Avenue DeLand, FL 32720	Antennas	(H) 904-736-9789 (B)
MONTAGUE, John, WØRUE 939 Arbor Mahtomedi, MN 55115	Computer Scientist	(H) 612-426-5673 (B) 612-781-3385 Ex. 276 (Secy. Ex. 265)
O'HARA, Thomas R., W6ORG 2522 S. Paxson Lane Arcadia, CA 91006	Fast-Scan TV/ATV	(H) (B)
OLSEN, Rick, N6NR 4289 Quapaw Avenue San Diego, CA 92117	Microwave Circuits	(H) 714-272-9939 (B) 714-692-6940
OXNER, Ed, KB6QJ Siliconix Incorporated 2201 Laurelwood Road Santa Clara, CA 95054	VMOS Power FETs	(H) 408-257-5403 (B) 408-988-8000 Ex. 2321

PARNASS, Robert S., AJ9S 8046 Knox Avenue Skokie, IL 60076	Computer & Software (Also expertise in RTTY)	(H) 312-679-6348 (B) 312-982-3745
PETERSEN, Daniel N., WA6OIL 1842 Ridge View Drive San Diego, CA 92105	Pc-board fabrication/Circuit packaging/Microwave consultant	(H) 714-263-9078 (B) 714-278-4100 Ex. 6588
PFEIFFER, Andrew, K1KLO 132 Whippoorwill Road Old Lyme, CT 06371	Mechanical structures	(H) (B)
RICHMAN, Harold, W4CIZ 3908 Lake Blvd. Annandale, VA 22003	RFI/TVI	(H) (B)
RINALDO, Paul L., W4RI 1524 Springvale Avenue McLean, VA 22101	Computer communications/ spread spectrum/technical aids to the handicapped	(H) 703-356-8918 (B) 703-734-0878
SEVICK, Jerry, W2FMI 32 Granville Way Basking Ridge, NJ 07920	Antennas & Broadband Transformers	(H) 201-766-6122 (B)
SIMPSON, Richard A., W6JTH 3326 Kipling Street Palo Alto, CA 94306	EME/Radio Propagation	(H) 415-494-9272 (B) 415-497-3525
SOKAL, Nathan, WA1HQC 4 Tyler Road Lexington, MA 02173	Solid-State Power Amplifiers	(H) 617-862-2388 (B) 617-862-8998
STEWART, Jim, WA4MVI Rt. 7, Box 161-A Hendersonville, NC 28739	Radio propagation/ predictions and EME	(H) 704-891-8534 (B) 704-684-0421
STUART, Ken, W3VVN 48 Johnson Road Riviera Beach, MD 21122	Dc power systems	(H) 301-437-1758 (after 7 (B) 301-428-4518
WALKER, Jeff, W4AAD 4517 Three Sisters Drive Pasadena, MD 21122	Equipment performance measurements and EMC/RFI	(H) 301-437-0171 (B) 301-267-2173
WEBSTER, Richard L., K9ULW 1775 Henderson Drive Marion, IA 52302	Test-procedures for communications equipment	(H) 319-377-8160 (B) 319-395-2726
WETHERHOLD, Edward, W3NQN 102 Archwood Avenue Annapolis, MD 21401	LC Filters	(H) 301-268-0916 (B) 301-224-4500 Ex. 243

RUSGROVE, Jay B., W1VD RFD #3, Polly Dan Road Burlington, CT 06013	Receiver design and performance	(H) 203-584-0776 (B) 203-582-9409
WILLIAMS, Glenn L., AF8C 513 Kenilworth Road Bay Village, OH 44140	Digital/logic/ASCII	(H) 216-835-4897 (B) 216-361-3315 (3-5 mi longer 12-1 PM)
WILSON, Paul M., W4HHK P.O. Box 73 Collierville, TN 38017	E.m.e.	(H) 901-853-8205 (Call (B) Thur, Fri, Sat days
WOOD, Brian, WØDZ 1505 Dover Avenue Loveland, CO 80537	RTTY/Microprocessor control/ Digital design/Software & firmware for computers	(H) 303-667-7382 (B) 303-667-5000
NEIL, J. P., KN6B 2336 Hilo Court Mountain View, CA 94040	Telephone standards & regulations	(H) (B)
ZINDER, David, W7PMD 4121 West Augusta Avenue Phoenix, AZ 85021	Power supply design	(H) (B)
MAGNUSKI, Henry S., KA6M 311 Stanford Avenue Menlo Park, CA 94025	Packet Radio	(H) (B)

The TAs listed below are members of the ARRL Committee on the Biological Effects
of RF Energy

BRADLEY, Peter M., N1ADX 200 East Main Street Westborough, MA 01581		(H) 617-793-5543 (B) 617-793-5370
DAVIDSON, David, W1GKM 105 Sherman Street Belmont, MA 02178		(H) 617-484-1189 (B) 617-890-8460 Ex. 396
HIGGINS, Lawrence, W5QMU 2522 Old Hickory Trail San Antonio, TX 78230		(H) 512-341-2910 (B) 512-656-0311
NORD, Peter J., WB8FGE c/o Schauer Manufacturing Corp. 4500 Alpine Avenue Cincinnati, OH 45242		(H) (B) 513-791-3030
SANDSTROM, Kerry, K5KS 1022 Warden Road San Antonio, TX 78245		(H) (B) 512-684-5111
STEPHENS, Roger, K5VRX Visiting Associate Professor Industrial Engineering University of Oklahoma 202 W. Boyd, Suite 124 Norman, OK 73019		(H) 405-329-0001 (B) 405-325-3721

ARRL TA NEWSLETTER

February 3, 1982

We welcome the TAs who have joined our ranks since the last newsletter was issued. The roster now contains 52 names. Tenured TAs whose appointment period has expired or is about to expire should not be concerned about reappointment. New certificates are prepared just prior to the expiration date. They are sent first to ARRL President Dannals, then to the related division director for approval and signing. Finally, they are mailed to the TA. The turnaround time can be as great as two weeks, owing to the slowness of the mail service these days.

ARRL Technical Department: Dennis Lusi, W1LJ, has been promoted from laboratory technician to assistant technical editor. This followed the retirement of Stu Leland, W1JEC, last December.

Phil Accardi, AJ1N, has joined the technical staff to serve as laboratory supervisor. He will be in charge of the lab, its technicians and the testing program for advertising approval and new products.

Pete O'Dell, KB1N, has become the conductor of our Technical Correspondence column, effective April 1982. Larry Wolfgang, WA3VIL, has succeeded Stu Leland as Hints & Kinks editor.

George Collins, KC1V, became the editor of Beginner's Bench in January of this year.

A new organizational chart for the HQ technical department is included with this newsletter.

New Threat of Interference: Cordless telephones have been released on the consumer market. They operate on a split frequency, with one channel being in or near the amateur 160-meter band. The remaining frequency is just below our 6-meter band. HQ has ordered two brands of cordless telephones in order to investigate the potential threat to our ham bands, and to learn how susceptible the phones are to RFI from amateurs. We have already received an "intrusion" report from a 160-meter amateur in NY state. He says he's hearing phone signals in the 160-meter band that "pin the S meter." A trackdown of the source showed it to be a neighbor some 1000 feet away. TAs who find these signals in our 160- or 6-meter bands, please file a written report on the particulars. Send it to W1FB at ARRL HQ.

QST Articles: We have put out a call for papers a number of times, but input from the TAs has been sparse. Once more we wish to solicit QST articles that treat subjects of modern, widespread interest to amateurs. Our need is primarily for construction articles of moderate to medium complexity -- projects that will encourage amateurs to build their own equipment and learn technical principles. We are looking also for material that addresses such topics as packet radio, spread spectrum, microwaves and amateur-related computer applications. The desired article length is 3 to 5 QST pages. You TAs are the experts in modern technology. What say?

IEEE Matters: The ban on technical department participation in IEEE professional programs has been lifted now that we are fully staffed once more. We hope to become involved again in the organization and presentation of technical sessions at ELECTRO, MIDCON and SOUTHCON. Many of you are excellent candidates for the delivery of technical papers. Please make your availability known to W1FB, and specify the subject area you prefer. The ARRL is unable to underwrite the cost of your participation in the IEEE professional programs, but perhaps your employer will sanction your travel and accommodation expenses.

A Reminder: ARRL TAs have the same privileges as other League field appointees. You may participate in our ARRL CD Party contests and wear the official League official ribbon at ARRL hamfests and conventions. Also, following coordination with Marge Tenney of our membership services department, you may give technical talks and represent the League at official hamfests and conventions. If your travel is approved, The ARRL will pay your travel and accommodation costs. We would like to see more of our TAs in the forefront at League affairs. Contact Marge for details. Also, the official ARRL TA lapel pin (white background) is available for \$2. Contact Marian Anderson at HQ if you do not have your pin.

ARRL Books: We are expecting to release our revised edition of the Antenna Book in the spring. Jerry Hall, George Woodward, Chuck Hutchinson and Doug DeMaw worked collectively on the new edition to update the text and add new material of immediate interest to amateurs. The book will appear in the QST size format.

Our new edition of the RFI book is available. Copies will be sent to each of you for comment. Please let us know about errors you may spot. We seek your input also on the 1982 Handbook, which all of you should have by this time.

TA Profiles: Our thanks to those TAs who sent personality sketches and photographs to Marian Anderson for use in QST as TA Profiles. Many of you have failed to supply her with data for the journal. Please consider sending the necessary information so that we may highlight you in QST.

QEX Newsletter: There seems to be some confusion concerning the intent of QEX, the League's new technical newsletter. The purpose of developing this publication was to provide a forum for authors whose material might be too long or technically detailed for use in QST. It does not carry technical articles of general interest. Another objective is to encourage experimentation among amateurs. In a sense, you might equate QST and QEX to IEEE Spectrum and the Proceedings. The editor is ARRL TA Paul Rinaldo, W4RI. Please contact him if you have a paper to offer. He is looking especially for material that addresses the amateur state of the art.

FCC Spectral Compliance: We are observing a steady improvement in the spectral purity of commercially made amateur transmitters. Most of today's equipment exceeds rather than meets the FCC specs for spurious output. Generally, the imported products are superior to the US products in this regard (a sad testimonial, indeed). In a like manner, the foreign-made receivers exhibit equal or better dynamic-range performance than that of American products.

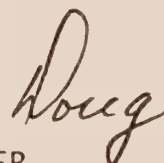
One problem area is that of solid-state "bricks" for vhf and uhf. Units that employ a switch-through feature for transmit/receive, using switching diodes, occasionally generate spurious products that aren't present without the switching circuit. We have rejected some of these amplifiers for QST advertising.

Synthesizer phase noise remains a problem under study. Other problems of concern to amateur operators are poor agc time constant, improper cw waveform shaping, insufficient receiver audio output versus distortion and degraded ultimate attenuation for i-f filters. All of these topics will be addressed in a future QST article by ARRL TA Hayward (W7ZOI) and W1FB. The intent is to encourage manufacturers to improve the performance of their products.

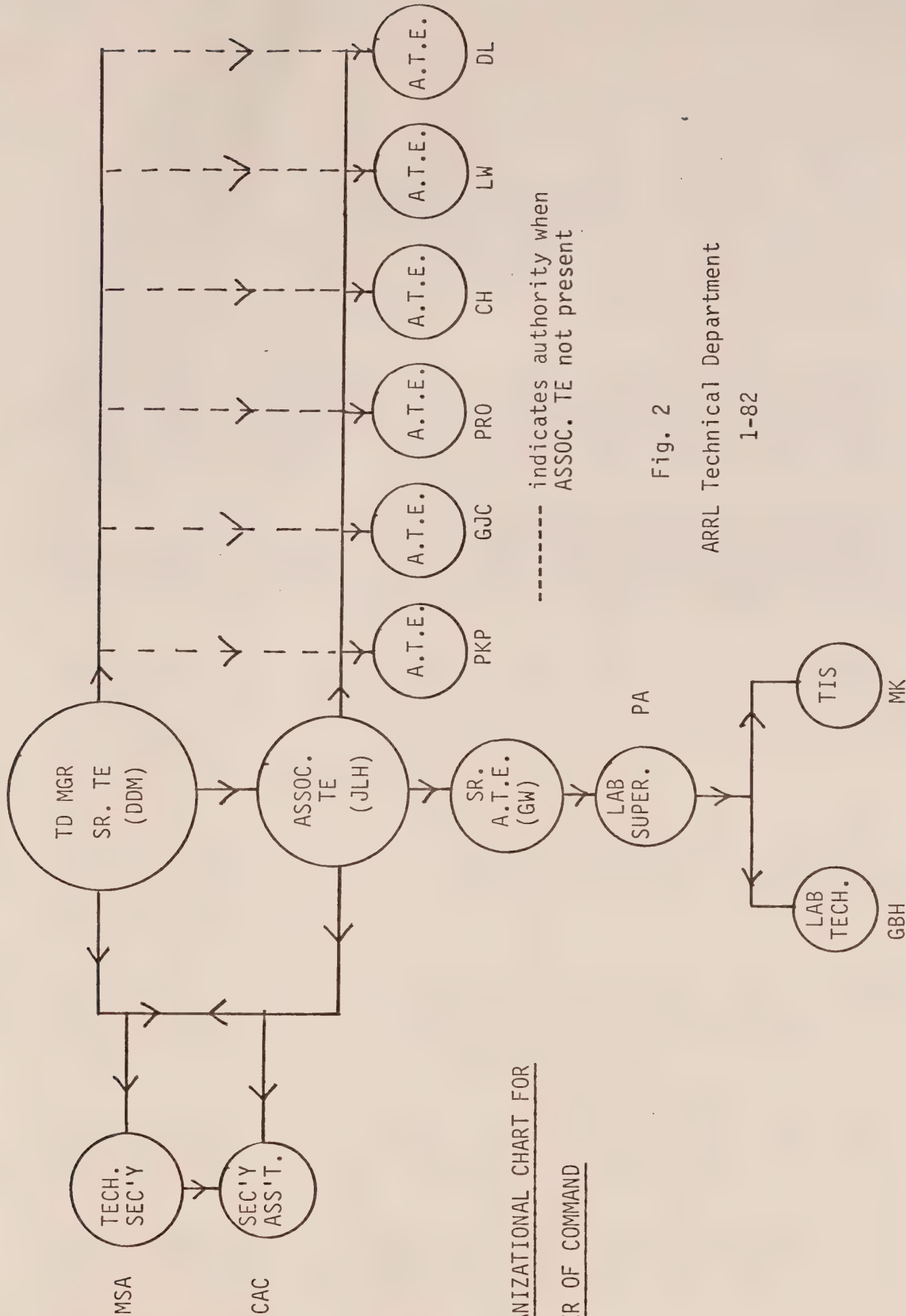
Personal Notes: Those who need 8P6 (Barbados) for DXCC can look for W1FB/8P6EU and Jean DeMaw, W1CKK/8P6FJ from April 3-15 on all bands from 160 through 10 meters. W1FB will handle the cw operation and W1CKK will be on ssb. A third station (8P6 call yet to be issued) will be operated by Marian Anderson, WB1FSB. In addition to the regular 100-watt hf operations we will be QRP with 7 watts on 20-meter cw.

Again, we want to express our pride and gratitude for the fine work you volunteers have been doing for Amateur Radio and The ARRL. Please call on us if we can help you with your work.

Personal 73,



Doug DeMaw, W1FB
Technical Department Manager
ARRL



ORGANIZATIONAL CHART FOR
ORDER OF COMMAND

Fig. 2
ARRL Technical Department
1-82

ARRL TA NEWSLETTER

May 18, 1982

This is a year of changes for the League. Our new president is Victor Clark, W4KFC. David Sumner, K1ZZ, has been appointed to the position of ARRL general manager, and a number of smaller but equally significant changes have taken place in other areas of the official family. Certainly, fresh ideas in leadership and planning will take us all down some different paths in the months and years ahead. Thus far, there have been no new directives given in the technical objectives of the ARRL, so the TA program remains the same as in the past. Your continued cooperation and service will be appreciated by the new officers, as it has been during the past by all of us. Your constructive input will always be welcome.

TA Conclave: TA Rick Olsen, N6NR, is attempting to round up as many TAs from his area as possible for a get-together during the Southwest Division ARRL Convention in San Diego (June 4-6). If any of you can attend the convention, let Rick know so that he can include you in the conclave. I will be present also, and am anxious to meet those of you who can make it to San Diego that weekend.

League Publications: Our new edition of the Antenna Book is available now. Copies have been sent to each of you for critiquing. Please jot down any errors you may spot and send the information to Antenna Book Editor Hall, K1TD. He will also appreciate having your recommendations for improving the volume.

We have not received much input from the TAs concerning the 1982 Handbook. Please go through your copy and pass any feedback you have to Handbook Editor Woodward, W1RN. The purpose of the free copies of our books is expressly to stimulate input concerning errors and improvements. Typically, we get response from only 10-15 percent of the TAs.

The new edition of Hints & Kinks is in the works. Each of you will receive a copy as soon as that book is available. Your comments in writing are solicited. Please send your remarks to Jerry Hall, K1TD.

Lapel-Pin Reminder: If you haven't obtained your official TA lapel pin (ARRL diamond with white background) you may wish to do that in time for your next public appearance at a club meeting or convention. The pins can be ordered through Marian Anderson, WB1FSB, at HQ for \$2.50.

TA Profiles: Sincere thanks to those TAs who submitted personality sketches and photographs for our QST TA Profiles. We have received many favorable

comments from readers concerning the Profiles. Many of you have not contributed to this excellent PR program. How about sending Marian Anderson the information she needs to prepare your profile for QST? If you're bashful about having your photograph appear in QST, then at least let us print your personality sketch.

TA Recognition at the Rochester Hamfest: At the recent Rochester, NY VHF Hamfest, recognition was given to long-time ARRL TA Geiser, WA2ANU, during the ARRL Forum. Vice Director Turnbull, on behalf of ailing Director Bieberman, W3KT, presented Geiser with (1) the pewter cup annual Technical Excellence Award; (2) a QST Cover Plaque Award; (3) a QST author's certificate and (4) a TA renewal certificate. Our congratulations to Dave Geiser for his many services to Amateur Radio through personal appearances, technical lectures, QST articles and consulting services to League officials. A number of other TAs deserve similar credit for their hard work. If you would like to perform more service to Amateur Radio than you have thus far, please contact Marge Tenney, WB1FSN, at HQ for details concerning public appearances. Don't forget that the League will cover your travel and accommodation expenses for authorized appearances. Similarly, we would welcome interesting QST articles from those of you who have not been contributing to the journal. An author's guide is available on request.

QST Articles: While on the subject of QST papers, we're still highly interested in receiving material that reflects the state of the Amateur art. Although we are receiving more articles from the field than we can publish, most of the data concern antennas. We get the impression that most of the workshop effort these days is in the area of antennas rather than around ham-shack equipment. We're especially interested in publishing information concerning the latter. TAs Hayward (W7ZOI), Geiser (WA2ANU), Dickenson (W2CCE), Wood (W0DZ), Bradshaw (W8EEF), Helfrick (K2BLA), Maxwell (W2DU), Oxner (KB6QJ), Pfieffer (K1KLO), Rinaldo (W4RI), Wetherhold (W3NQN), Sevick (W2FMI) and Wilson (W4HHK) have made outstanding contributions to QST. We'd like to hear from the rest of our TAs also! How about writing up that latest project and letting us have a crack at it?

Staff Changes, Technical: Former lab technician, Dennis Lusi (W1LJ), has moved up to an assistant technical editor's post. He is the column editor for Technical Correspondence. Our previous technical correspondence specialist, Mike Kaczynski (W1OD), has been advanced to laboratory technician. George Collins (KC1V) was appointed editor of Beginner's Bench. Phil Accardi (AJ1N) joined our staff as laboratory supervisor. Phil is in charge of our testing programs and is responsible for the integrity of the lab. He also serves as advertising approval person (evaluating new electronic products submitted for QST advertising). Former assistant technical editor, Pete O'Dell (KB1N) transferred to the membership services department.

IEEE Activities: We are once more involved in IEEE programs for the purposes of Amateur Radio PR, closer exposure to the industry and the presentation of amateur programs at IEEE conventions. Our proposal for a session on VMOS and power FET technology (MIDCON -- Dallas, TX in Dec. of 1982) has been accepted. TAs Oxner and Hejhall will give papers

that treat power FET applications. I will also give a paper on the general subject.

We have filed a proposal for a session at SOUTHCON/83. It will address hf antennas and ground systems. TA Sevick has offered to take part in the program. Historically, our League-organized sessions have been rated in the top ten of the usual 34 sessions. The ratings are based on technical content, speaker performance and attendance.

Commercial Equipment: We continue to see improvement in the spectral purity of amateur transmitters. Similarly, the dynamic-range performance of most receivers continues to improve. But, other advances -- notably synthesizers -- are degrading the equipment performance with wide-band noise. Reciprocal-mixing problems are pronounced in some receivers we are evaluating. Also, little attention seems to be paid these days to proper cw waveform shaping, agc performance and audio-amplifier performance in receivers. TA Hayward and I have co-authored a QST article that addresses some of the more prominent faults in modern equipment ("Modern Transmitters and Receivers -- What Ails Them?") It is hoped that our constructive critique will encourage the manufacturers to improve their designs in upcoming models.

New Professional Books: TA Hayward has written an excellent book on the subject of rf design. It is entitled Introduction to Radio-Frequency Design. TA Helfrick has authored two books on Amateur Radio. TA Oxner has written a book called Power FETs and Their Applications. I have two professional books in circulation (new). They are Ferromagnetic Core Design & Application Handbook, and Practical RF Design Manual. All of the foregoing books are available from Prentice-Hall, Inc. TA Sevick is currently writing a book for the same publisher.

TA Newsletter: Your input for the Newsletter is solicited. We will be happy to include pertinent items that you may wish to communicate to your fellow TAs. Send your material to Marian Anderson, ARRL HQ.

Ham Radio Magazine: We have learned that Skip Tenney, W1NLB, who is the publisher of Ham Radio, is looking for a skilled, experienced technical person to serve as Technical Editor. A solid technical background is a must. If you know of qualified candidates, please have them contact Skip at their earliest convenience. The phone number is 603-878-1441. Perhaps you or one of your colleagues may be interested in this challenging, career position.

Summary Comments: We thank all of you for your many services and dedication to Amateur Radio and the ARRL. Please don't hesitate to contact us if we can be of help to you. Meanwhile, have a great summer season!

Personal 73,



Doug DeMaw, W1FB
Technical Department Manager
ARRL HQ

ARRL TA NEWSLETTER

August 24, 1982

Apologies for the longer-than-normal gap between TA newsletters. Significant news items have been few in number in recent weeks, owing perhaps to the usual slump in Amateur Radio activities during the summer season. Furthermore, input for the newsletter from the TAs has been nil. Don't forget that this bulletin can serve as your forum if you have comments that are germane to the TA program.

CONCERNING QEX: Some of you have contacted Hq. to inquire about free receipt of QEX. Each of you who were TAs at the time QEX was initiated received a complimentary copy of the first issue. If you desire subsequent issues, you will need to subscribe. You may contact TA Paul Rinaldo, W4RI (editor), about a subscription. Paul says that he's looking for QEX article material. The theme should embrace the experimental aspects of modern Amateur Radio technology. Generally, QEX articles are those that might be considered by QST readers as "too high-brow or lofty" for the ARRL official journal.

TECHNICAL STAFF CHANGES: Assistant Technical Secretary Sue Zagorski has resigned and is moving to Florida. She has been replaced by former Club & Training Assistant Maureen Thompson, KA1DYZ. Also, Gerald Hull (not Jerry Hall!) continues to move upward in rank. He was recently upgraded from editorial assistant to Assistant Technical Editor. Gerry (AK4L/VE1CER) joined the Hq. staff as a lab technician two years ago. Mike Kasczynski, W1OD, has been advanced from Technical Information Specialist to Lab Technician. We are still looking for a full-time technical information specialist. Please direct interested candidates to Jerry Hall (K1TD) or George Woodward (W1RN).

POWER-FET TECHNOLOGY: There will be an excellent two-part QST article on the state of the power-FET art, running (tentative) in Dec. 1982 and Jan. 1983 QST under the byline of ARRL TA Helge Granberg (K7ES). He describes a 2-30 MHz broadband linear amplifier that outputs 1600 W. He uses MRF150s (16 transistors in 8 amplifier blocks) with a 50-V dc supply.

An ARRL-organized technical session on power FETs and their applications will be presented at IEEE MIDCON in Dallas, TX in November. Papers will be given by TA Roy Hejhall (K7QWR), TA Ed Oxner (KB6QJ), Dr. Phillip Soo-Hoo of GE and Doug DeMaw, W1FB. An ARRL session has been accepted for IEEE SOUTHCON in Atlanta, GA next January. The session will deal with antennas. Papers will be given by TA Jerry Sevick (W2FMI), Arch Doty (K8CFU) and a co-authored paper by TA Jack Belrose (VE2CV) and Doug DeMaw (W1FB).

A 60-watt-output power FET Class C amplifier was developed recently by W1FB for use in the MIDCON paper. Samples of the MRF138 were provided by Helge Granberg. Tests were conducted at 7 MHz in a broadband, push-pull configuration. A 7-pole Chebyshev filter was used at the amplifier output. The performance characteristics are: Power gain = 23 dB.

Efficiency = 72.5 percent; Driving power = 288 mW; Spurious output is 70 dB or greater below peak cw power. $V_{DD} = 28$ volts. The rated gain of an MRF138 is 15-18 dB at 30 MHz and 10 dB at 175 MHz. Motorola is well into the power-FET market now, with components for 12, 28 and 50-volt operation.

ARRL CD (communications department) PARTY: A reminder that there will be a CD Party on October 9 and 10, cw operation, from 1800Z the first day to 0600Z the second day. The phone portion of the contest will be from 1800Z on October 10 to 0600Z on October 11. Logs are available from Hq. Here's your chance to QSO other TAs and assorted League officials and field-service people. In the past, a sparse turnout for CD Parties has been noted for our TAs. We hope you will let your voices (and fingers) be heard this time. The exchange calls for your appointment (TA) and your section (such as NTX, SFL, OH, IA, etc.). CU then! Details are in your fall 1982 copy of QCD.

QRP MAILBOX: K3TKS informed Hq. recently that his QRP club has a cw "mailbox" on 7043 kHz. It can be accessed by sending a series of Vs, then K8IFZW. K8IF is the president of the club. This may be of interest to those of you who operate gnat- or mite-size rigs.

NEW ANTENNA BOOK: Each of you should have your review copies of the new edition of the Antenna Book. Editor Jerry Hall is standing by for your written comments (errors, suggestions for improvement, etc.). Your constructive criticism is solicited and will be greatly appreciated.

THE AMATEUR MARKET: Reports received at Hq. and afield indicate mixed emotions about the market place versus the U.S. economy. Some dealers report excellent business trends, while others say the situation has become chaotic. One leading manufacturer of ham gear has the staff working a forced three-day work week indefinitely, and recently laid off some 70 employees. Another leading manufacturer reported last week that business is more brisk than ever, but that they're just breaking even: They dare not increase the product price for fear of pricing themselves out of the market.

Despite the high price tags on the new "super boxes" that are being released, amateur interest in the transceivers seems to be high, according to the inquiries we receive about features and performance. We are noticing good receiver dynamic-range performance from the new equipment, and the spectral purity is excellent too. There seems to be an improvement in the performance of synthesizers in terms of phase noise and spurs -- a definite step forward! The ICOM IC-730, for example, is exceptionally clean in that respect.

NATIONAL CONVENTION: We had a super convention at Cedar Rapids, IA in July of this year. The technical sessions were outstanding in quality and subject matter. Each was well attended, owing to the

excellent organization and hard work of the program committee. It was not unusual to have 200+ people at a session, even though the total convention registration was on the order of 2000 to 2500. Part of the success story can be attributed to the committee people placing large posters at the doorways to the speaking room: The posters indicated the session theme and speaker in progress, plus similar information for the upcoming session. An excellent procedure, and one that more committees should employ. It was a pleasure to meet ARRL TA Dick Webster (K9ULW) in person for the first time, and to renew acquaintances with such notables as Bill Sabin and Walter Bruene of Collins Radio.

Don't forget that you can be a part of the ARRL hamfests and conventions by contacting Marge Tenney of the Hq. staff and letting her know you're interested in giving a paper and helping to represent the ARRL at such affairs. Your travel and accommodation expenses will be paid by the League, if your trip is coordinated with Hq.

QST ARTICLES: We're still in need of hardware articles -- especially those of short duration, respective to construction time required for projects. Although QST is scheduled through May 1983 with articles, we're short on hardware material. The contributions continue to favor antennas and tutorial data. How about writing up that latest accessory item you built for your home station? Although you may feel it is rather ordinary, the QST readers might be delighted to read about it.

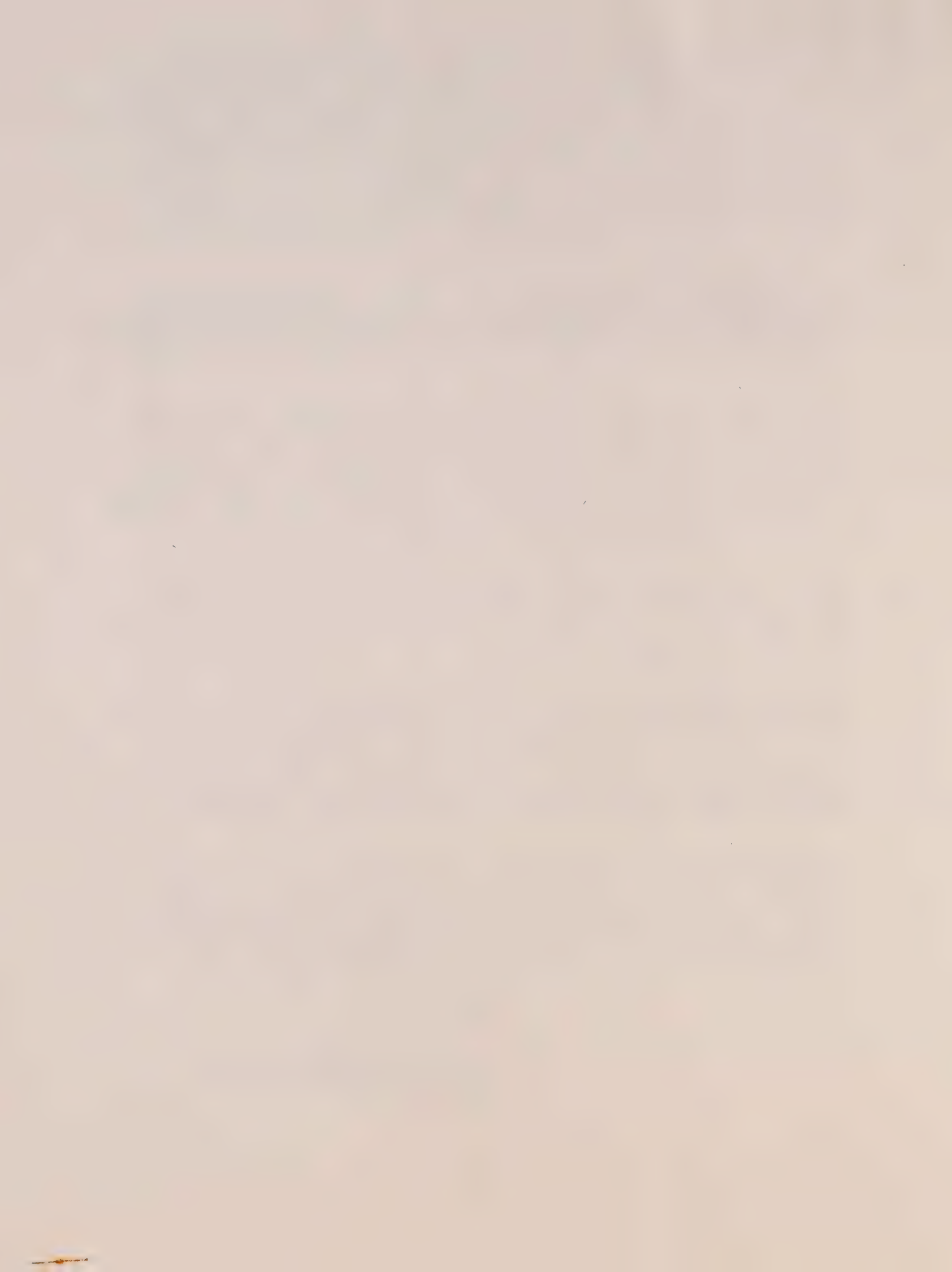
Despite this plea for simple articles, we are looking for high-level material that deals with the state of the amateur art. If you have developed something that should be documented in the journal, let us review your outline or manuscript. Computer programs are not of interest to us, however.

EQUIPMENT DONATIONS: If your employer has test equipment or component parts that are being disposed of, let us know. We will be happy to accept donations for use in our laboratory. An official statement of value will be given by the ARRL, should the donor wish one for tax purposes. Items that can't be used by the League will be passed on to schools for use in radio classes, or to radio clubs in foreign countries where component parts are difficult or impossible to obtain.

CLOSING COMMENTS: The ARRL expresses its gratitude for the outstanding work being done by its TAs. We've added some names to the TA roster since the last newsletter was written. If you did not receive your updated TA roster, please contact Marian Anderson (WB1FSB) and request a copy. Also, she's still waiting (and waiting!) for photos and data from many of you for use in QST TA Profiles. What say, fellas?

Personal 73,

Doug DeMaw, W1FB/8P6EU
Technical Department Manager
ARRL, Inc.



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Paul Madison WILSON, W4HHK 226 Peterson Lake Rd., P.O. Box 73 Collierville, TN 38017	Self employed (Photographer)	EME, MS and uhf	(H) 901-853-8205 (B) 901-853-8205
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David A. ZINDER, W7PMD 4121 W. Augusta Phoenix, AZ 85021	Sperry Flight Systems (Principal Engineer)	Power supplies and AC power systems	(H) 602-939-1143 (B) 602-863-7257

* Data form not received.

ARRL TA NEWSLETTER

January 12, 1983

First off, may 1983 be the best year for each of you and your families! Next, our apologies for not preparing this newsletter much earlier. The holiday period, plus ever-present deadlines have delayed this communique.

Several TAs expressed concern because they had not been contacted by ARRL Hq. personnel. They felt that their services were substandard, or that they had been dropped from the program. The fact of the matter is that during 1982 we had but few occasions to consult with our TAs. Silence is a good omen, and none of you were forgotten. Also, renewal certificates are made out prior to term expirations in order to provide you with a new certificate before your term expires. If for some reason you do not receive your new paperwork, notify Marian Anderson.

Technical Staff Changes: We welcome Bob Schetgen, KU7G, from the state of WA, as our new Technical Information Specialist. You may hear from Bob occasionally when he needs advice from outside Hq.

It is with regret that I announce my early retirement, effective in May of 1983. Jean and I will both retire to our farm in central lower Michigan. For me it will be semiretirement, since I will continue to work for the League on a part-time basis as a contributing editor and columnist. I will operate a consulting business to be known as Oak Hills Research. We plan also to do some tree farming on the 40-acre plot. It is not yet known who will succeed me as Technical Department Manager, but that person will be administering the TA program. Our 18 years as Hq. staff members have been enjoyable, challenging and highly rewarding in a spiritual sense. Being able to serve Amateur Radio through QST and our books has been the highlight of my professional career. I will miss my personal contacts with each of you.

1983 Handbook: By now you should have received your review copy of the 1983 Handbook. Likewise with the current edition of the Antenna Book. Jerry Hall, K1TD, our book-team editor/leader, is awaiting your prompt input concerning errors, typos and suggestions for improvement. We have had very little positive response from our TAs in past years. Please make an effort to list your criticisms early (in time for our deadlines pertaining to the next edition), then get them off to Jerry.

IEEE MIDCON: The ARRL-organized power-FET technical session at MIDCON (Dallas, TX) in early December was a great success. Papers were given by TA Roy Hejhall (Motorola) and TA Ed Oxner (Siliconix, Inc.). Additional papers were delivered by Dr. SooHoo of GE and Doug DeMaw. Attendance was good, despite the early morning hour for our program. Another ARRL session will be given this month at IEEE SOUTHCON (Atlanta, GA). The session theme is "antennas." It will mark the 16th ARRL-organized IEEE program since 1972.

Amateur Commercial Equipment: Trends continue toward high receiver and transmitter performance in commercial gear. We are still waiting to receive and test the Kenwood TS-930S, despite a year of promises from the manufacturer. But, we have received the FT-One and FT102 transceivers from Yaesu. The receiver dynamic range is excellent, as is the spectral purity of the transmitters. Synthesizer noise is declining in most of the recent equipment we have examined. The ICOM IC-720 and 730 transceivers were very clean with regard to reciprocal mixing when tested at W1FB, just two blocks from W1AW. Likewise with the FT102. We are still awaiting a review unit of the IC-740.

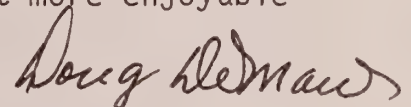
The January 1983 QST article on equipment performance (Hayward and DeMaw) has opened Pandora's Box with respect to mail and phone calls from QST readers. It appears to be our most popular technical article in recent years, and many compliments are being received. We have not heard from the manufacturing community (yet). Many readers have urged us to publish more articles of that type.

30-Meter Band: Late in 1982 the FCC granted operating privileges to the U.S. amateurs at 10.1 MHz. The frequency spread is 10.100 to 10.150 MHz, with a "no-man's land" between 10.109 and 10.115 MHz. Some amateurs are still straying into the "forbidden zone," so be careful if you're using the new band! Propagation on 30 meters is quite interesting and different. It is strange to, at times, hear VKs, JAs, Europeans and nearby U.S. stations -- all at the same time! Occupancy remains light, owing to so few amateurs having equipment for the WARC bands (or because they don't care to operate cw). The 250-watt power restriction has made the band suitable for QRP work, and many stations can be heard at the 1-5 watt power level. The major activity is taking place between 10.100 and 10.109 MHz. I have had no difficulty working JAs, VKs, ZSs, PYs and EUs with 100 watts and a sloper at 50 feet. Thus far I have heard none of our TAs on 30 meters, but I understand that TA Hayward is running QRP on the band, and is having good results. A reminder: Thus far the ARRL is not giving awards or sponsoring contests on 30 meters.

QST Articles: It is worth repeating that we encourage our TAs to contribute papers for use in QST. As always, we are looking especially for construction articles of widespread appeal. We are in particular need of material about microwaves -- notably hardware articles that show how to build one's own microwave gear. Other topics of high interest are hf-band linear amplifiers, receivers, band-switching solid-state transmitters and test equipment. We have no need at this time for tutorial text or articles about keyers, Transmatches or antennas. What say fellows?

In Summary: The ARRL thanks you for your dedication and service in 1982. Let us know what we can do to make your field appointment more enjoyable in 1983.

Doug DeMaw, W1FB
Technical Department Manager



ARRL TA NEWSLETTER

July 19, 1983

Permit me to introduce myself. I reported to duty here at ARRL Hq on May 6 as Technical Department Manager, replacing Doug DeMaw, W1FB. Prior to that I was a consultant in communications and data processing in the Washington, DC area. I was heavily involved with AMRAD and its experimentation in packet radio, spread spectrum and telecommunications for the deaf. I was first licensed in 1949, received my Extra Class license in 1954 and have been an active amateur through the years.

Doug left Newington with mixed emotions. He has certainly left his stamp on things over the 18 years of his ARRL career. Someone counted over 200 articles that he has written for QST. I don't expect to duplicate that achievement and am wondering where he found the time to write any articles. Fortunately for us, he's still keeping up the same pace in Luther, Michigan. He tells us that he and Jean are putting in 14- to 16-hour days getting the farm and his new lab in shape, yet manages to write articles for QST each month "in his spare time." Oh, I forgot to mention that Doug is now a TA. We wish Doug and Jean the best of luck in their new life.

Technical Department Staff

You may have heard by now that George Collins, KClV, and George Woodward, W1RN, left the Technical Department for private industry just before Doug left Hq. Gerry Hull, VE1CER/AK4L, followed suit in early July. We're sorry to lose them but recognize that there are other worlds to conquer as well as economic benefits.

At the time that George Woodward left, he was in the midst of preparing the 1984 Handbook. Luckily, he agreed to "moonlight" for nearly two months to help us complete the editing.

As of this writing, we have three staff vacancies, are receiving applications and are interviewing candidates. Although we are not competitive with industry pay, we are finding people who are interested in working here. We are particularly looking for individuals with solid technical backgrounds and recent design experience, both hardware and software. If you know of someone with the qualities we are looking for, please let me know immediately.

1985 Handbook

Chuck Hutchinson, K8CH, has been assigned to edit the 1985 Handbook. No, we're not jumping the gun, although it seems to be a long time off. While in the past Handbook editing was spread

over the entire year, the 1985 edition will be a major revision. This is partly because of the changeover of phototypesetting equipment. If you look closely at some chapters, you will see variation in type resulting from a mixture of copy from the old and new typesetters. So, the 1985 edition will be the one where we retypeset everything. That will give us the opportunity to retitle chapters and reorganize the contents while adding new material. Normally, the copy flows from the Technical Department to the Production Department in April and May. For the 1985 edition, the copy flow will start in January 1984. We have the intervening time to get our ducks in a row.

So, using your 1983 Handbook for the moment, I would appreciate your analyzing the chapter titles and general content in each chapter. The 1984 edition has the same chapter titles and general subject content. Some construction projects have come and gone; also we replaced NBVM with a description of ACSB and added AMTOR.

Action Item: Please mail any comments you would like to make on a suggested chapter lineup and major subjects you would like to see in each chapter of the 1985 Handbook by August 26.

Later this fall, when you see the 1984 Handbook, we'll be looking for detailed comments toward the 1985 edition.

ARRL Electronics Data Book

Stocks of this 1976 edition are expected to run out around January 1984. In a recent publication review, we decided that there is a continuing need for a book of this type. As you are aware, this book contains not only an assortment of useful technical reference data, but some of it is unique. We want to preserve most of the original material and add new data. There is sentiment here to regard the new book as a supplement to the Handbook to include reference data which cannot be fit into the Handbook as well as expansions of data that is abbreviated in the Handbook. The Data Book is to be updated every few years rather than yearly as the Handbook is.

Action Item: If you have specific suggestions about what should be added and what should be dropped from the Data Book, please let me have your thoughts by September 1.

Junior Handbook

That's not going to be the title, but we are planning to write a book to take the Novice or pre-Novice from scratch up the point where the Handbook can be read and understood. We constantly are being reminded of the need for such a book. Understanding Amateur Radio fills some of the need, but the demand for this title has been less than anticipated. The time fuse on this project is longer than the books mentioned above. For planning purposes, we'd appreciate your advice on what's needed in a book for newcomers and how to make it a best seller.

We're also in search of the perfect title -- The ARRL Beginners Handbook or The ARRL Novice Handbook have been suggested.

UHF/Microwave Book

Chuck Hutchinson, K8CH, is the editor of a new major ARRL book on uhf and microwaves. This is to be a publication with most of the writing done by authorities in their field on a paid basis. Chuck has the book outline and has lined up most of the authors he needs with the material to start coming to him by January 1984. Nevertheless, it's not too late for suggestions as to material or additional authors. If you want to know the status of the book and discuss any aspect of the book, please contact Chuck. Incidentally, we hope to assign an assistant editor to this project as soon as we're up to full staff.

Computer-Radio Interface Book

We are often asked to advise individuals how to interface X microcomputer to Y radio, particularly for cw and RTTY operation. More recently, this includes the desire for an AMTOR capability. Unfortunately, the probability of finding a commercial interface or an article on a home-brew unit is one over the number of different computers raised to the power of the number of types of radios. We hope to change these odds by developing a common interface unit which includes space for "personality modules" for the specific computer and radio. Eventually, this will be the subject of a new ARRL book which will contain, among other things, construction information on the interface hardware and code-conversion routines for the computers. Ideas?

Radio Frequency Interference

An update is soon to be in the works. We have comments from the RFI Task Group and a new version of the FCC booklet on how to identify & resolve radio-TV interference problems. Chapter 1 is to be revised to reflect the existence of Public Law 97-259.

And More Books

As if this weren't enough, the League is publishing a book on Yagi Antenna Design by the late Jim Lawson, W2PV. Also, we want to do an Antenna Compendium of unpublished antenna papers and will be issuing a call for papers in the near future. Finally, we're thinking about a replacement for Solid-State Design.

QST QST QST

Technical articles are scheduled through December with January 1984 partially filled in. The technical editors are now completing their articles for November and are ready to start on those scheduled for December. So, in the next two months we will need additional manuscripts to keep the pipeline full. If you're thinking about an article, now is a good time to start writing.

As Doug never missed an opportunity to say, we need some construction projects of widespread appeal. We are particularly hungry for microwave projects -- tried and tested ones for QST and the Microwave Book, experimental ones for QEX.

For QST we need articles on equipment and antennas for the new 18- and 24-MHz WARC bands so that we'll be ready when the FCC gives the green light.

AMTOR is ripe right now for good articles.

Direction Finding

Minute 67 of the April 21-22, 1983 annual meeting of the Board of Directors reads:

"On the motion of Mr. Butler, seconded by Mr. Wangler, unanimously VOTED that the Board of Directors instructs the General Manager to undertake a staff study to develop a program for encouraging increased experimentation by amateurs with high-frequency direction-finding equipment and techniques, with the objective of enhancing the ability of the Amateur Radio Service to assist in monitoring activities as provided for by Public Law 97-259."

Some weeks ago, I sent a request for ideas to a number of TAs and received much-appreciated replies from Bob Rose, K6GKU and Dick Simpson, W6JTH. Both Bob and Dick suggested the use of ferrite loops for portable DF receiving antennas. A tunable ferrite-loop-stick antenna would make a good construction article.

It appears that we need to have a combination of things to make DF work in the Amateur Radio Service. In almost every local area, we need some simple DF devices such as the ferrite loop. At the Section or Division level, we need some more sophisticated DF gear and fit these resources into a national DF net. That's getting ahead of ourselves, however. Right now, I'd be pleased to have one good fly-away DF package with a few well-trained operators who could handle a DF problem anywhere in the country.

This is a continuing problem. So don't hesitate to break in if you have something to contribute to the solution.

Radio Connector Standardization

At the same Board meeting, Minute 21 tasks the Technical Department to develop connector standards for Amateur Radio equipment. Lack of standardization of microphone connectors, for example, has been a source of irritation for many amateurs. However, in emergency situations it is an important operational advantage to be able to connect different microphones to the available radios. The problem of standardization starts out as a "Mexican standoff," with every equipment designer willing to

standardize only if the other designers give in. It's even more complicated than that; different radios in the same plants do not follow a standard for connector type and pin assignments. I droned on about this subject in an editorial in QEX 8.

At the moment, we're gathering information on connectors used on existing radios. We believe that we can make at least one recommendation that has a chance of sticking -- that of using the CEE-22 3-wire grounded ac connector. Dc connections, audio connections, and digital control I/Os will be much more difficult. We'll need lots of help on this project.

Product Reviews

Minute 37 of the same meeting directed us to begin purchasing items for product review. Minute 38 set up a reserve of \$12,000 for this purpose. We have just drafted a new Product Review policy to implement the Board directives. If you would like a copy of the policy as approved, please drop me a note.

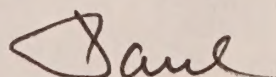
Under our old system, the Product Review Editor was dependent on the manufacturers for the loan of equipment for review. In many cases, the review model was received many months after the first deliveries to the distributors. Then, because we had a large number of reviews being conducted simultaneously, there was some queuing of the reviews for the QST "Product Review" column. So, we have decided to cut down the quantity of items, purchase the most important items as soon as they are available, and try to cut the editorial lead time in half. I think that you'll see a noticeable improvement starting around December. Meanwhile, we've increased the number of product-review pages from 4 to 6 to clean out the backlog. Other items which are not selected for product review will be handled as new-product announcements in QST.

Technical Coordinators

About half of the ARRL Sections have a Technical Coordinator (TC), and Marian Anderson, WB1FSB, is processing new appointments every week. She includes a copy of the TA roster in her first mailing to TCs. So, don't be surprised if you get called upon for advice in untangling a technical problem in the TC's section. It takes a real expert to handle insoluble problems!

Richard Regent, K9GDF, volunteered to publish the Technical Coordinator newsletter. July was its premiere edition. The Technical Department will offer as much support as possible to this new newsletter.

73,



Paul L. Rinaldo, W4RI
Manager, Technical Department

